

ADDITIONAL FEE

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R E M A R K S

The Office Action issued March 27, 2006 has been received and its contents have been carefully considered.

Submitted herewith is a complete copy of the drawings with proposed amendments indicated in red. Before submitting replacement drawings that are destined to be changed, applicant respectfully requests the Examiner to review and approve the amendments to the drawings.

In particular, applicant wishes to delete Figs. 5a-5g of the drawings which disclose an embodiment which is not included in the present invention. The distraction appliance according to the invention is a two-part device with a first distractor module (Ref. No. 1 in Figs. 1a and 1b) and a second distractor module (Ref. No. 2 in Figs. 1a and 1b). The first distractor module is fixed at the teeth of the lower jaw and the second distractor module is connected to the cut bone segment (UKFS) at the bone of the lower jaw above the chin bone.

The specification of this application has been amended to delete all reference to Figs. 5a-5g and to renumber Figs. 6-10 as Figs. 5-9, respectively.

The Examiner's approval of these amendments to the drawings and specification is respectfully requested.

The appliance according to the present invention, with the first distractor module and second distractor module, is not used for distraction of an osteotomy through the complete bone of the mandible as is shown, for example, in the U.S. Patent No. 6,358,255 in Testa with a fracture or sectioning line of the bone, indicated by the line "C" in Figs. 5, 7a-7c, 8a, 9a, 10a, 11a and 12a.

In contrast, the present invention concerns a two-part appliance for distraction of the special bone segment shown in Fig. 1a. The distraction appliance may be implemented with a first distractor module and a separate second distractor module (not connected together) as shown in Figs. 1a and 1b or it can be implemented with the two-parts connected together as shown in the embodiments according to the original figures 6-10 (now Figs. 5-9, respectively).

Claim 1 has been amended to "particularly point out and distinctly claim" this two-part structure in clear, simple language.

Claim 1, as well as the remaining claims in this application, have also been reviewed and amended, where necessary, to overcome the informalities kindly noted by the Examiner in the Office Action. It is believed that all of the claims of this application are now clear and definite.

The indication that claims 10-15 and 18-23 would be allowable if rewritten in independent form is noted with appreciation. However, it is believed that claim 1, as now amended, distinguishes patentably over all of the references of record.

Claims 1-9, 16 and 17 have been rejected over the U.S. Patent No. 4,433,956 to Witzig and U.S. Patent No. 5,829,971 to Razdolsky et al. in view of the aforementioned U.S. Patent No. 6,358,255 to Testa. These rejections are respectfully traversed for the reasons given below:

The patents to Razdolsy and Testa disclose devices for osteodistraktion; these devices are used for distraction along an osteotomy (break line through the hole bone - see for example Testa, Figure 5, line C; or the break line CS in Figure 8 of Razdolsky and also the dark line in Figures 7 to 10 of Razdolsky (the dark parts are new bone material built up along the osteotomy)).

The device of Witzig also has nothing to do with a distraction apparatus for orthodontic/orthognathic and maxillofacial surgery purposes. Witzig discloses an improved orthopedic appliance for correcting a malocclusion of the teeth as it is shown, in particular, in Figures 1 and 2. The Witzig device has anterior segments 11 and posterior segments 12 with the cap-shape form so that these segments 11 and 12 can be put over the corresponding teeth for fixing the teeth which have to be corrected in their orientation. These segments 11 and 12 are connected with wires 20 and 24 (for example) and also with an expansion screw assembly 13 so that the distance between the segments 11 and 12 can be shortened and/or extended by said screw assembly 13. These kinds of devices are very well known for correcting the teeth of children and young people. In particular, the device of Witzig is removable so that the user can take it out, as necessary.

Considering the devices of the cited prior patents with the device of the present invention (with "first distractor module" and "second distractor module"), one finds that only the devices of Razdolsky or Testa have a "first distractor module" comparable to that of the present invention. The device of Witzig could be a device comparable with the first

distractor module of the invention, but used for orthopedic correction of the teeth (and not for distraction of a out-cut bone segment in the front of the lower jaw above the rim of the chin).

It is not correct that a combination of the device of Witzig (as a first distractor module) and the device of Testa correspond to the distraction apparatus according to claim 1 because also the device of Testa is used for distraction along an osteotomy across the complete cut or broken bone (the break line is also called "osteotomy") and is not built up with the features of the second distractor module fixing the anterior mandibular bone segment (UKFS) at the lower mandibular rim (UKR) (as shown in Figure 1a of this application and recited in claim 1).

The distraction apparatus according to the invention has the advantage that, in the case where the second distractor module 2 is constructed as a hinge (see Figures 1b, 1c, 1d, 1e and also Figures 4a, 4b) the anterior mandibular bone segment (UKFS) can be distracted to the front in relation to the lower mandibular bone segment (UKR) and/or the teeth "Z" in Figure 1b can be distracted to the front with the first distractor module 1, for example by rotation of the part 6 of Figure 1b. Therefore, the bone of

the chin above the lower mandibular rim of the chin can be corrected together with the front teeth by manipulating the first distractor module 1 and the second distractor module 2 (To pull the lower part of UKFS to the front, screw element 13 is rotated with the end of the screw drilled into the bone).

It is not required, in the simple form of the second distractor module, that the second distractor module be constructed as a hinge. If this device is just a little bit flexible, it can be also constructed as a small plate, but a hinge is the preferable form.

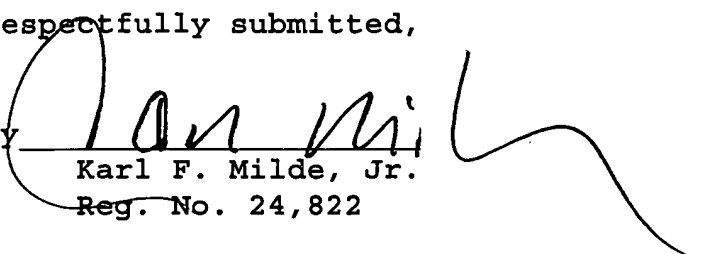
Accordingly, claim 1, as amended, is believed to distinguish patentably over these references.

Since all of the remaining claims are dependent from claim 1, and since all of the formal issues raised by the Examiner have been overcome by this Amendment, this application is believed to be in condition for immediate allowance. A formal Notice of Allowance is accordingly respectfully solicited.

Respectfully submitted,

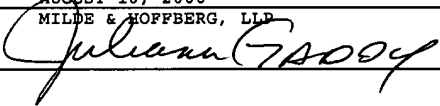
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on AUGUST 10, 2006  
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